

items of information were collected: hospital ID; admission and discharge dates; age; sex; race; hospital service category; primary, secondary, and tertiary diagnoses; payment source; discharge status; and zip code of patient's residence. Only about half of these variables were employed in the initial planning reports provided to the hospitals, and there remains from the study a substantial body of data with potential for further analysis.

### Representativeness of the Sample

A question naturally arises concerning the representativeness of one month's information. To address this question, data from the October study were compared to fiscal year 1978-1979 information derived from the N.C. Division of Facility Services (DFS) annual licensure form. According to the DFS data, 855,132 patients were discharged from 132 North Carolina short-stay general hospitals during the year, including out-of-state patients but excluding newborns and prematures. Multiplying the comparable October study figure times 12 and adjusting for six percent non-participation yields an annual estimate of 840,369 discharges, only 1.7 percent less than the actual figure.

As might be expected, estimates are less accurate when various subdivisions of discharges are considered. In general, a one-month sample is least representative of elective procedures and better represents more random admissions. For example, for the 132 general hospitals, the estimate from the October study of an annual number of thoracic surgery procedures was 9,052, while the number reported through DFS was 6,329, for a difference of 43 percent (using 6,329 in the denominator). For obstetric discharges, on the other hand, the October estimate of 94,640 discharges per year compared to the DFS figure of 89,969, a difference of only 5.2 percent. For other categories where comparison between the two data sets was feasible, the annual estimate from the October data, the DFS figure, and the percent difference between the two are shown below.

	<u>October Estimate</u>	<u>DFS</u>	<u>Percent Difference*</u>
Psychiatry	25,792	18,572	39
General Surgery	118,918	136,945	-13
Neurosurgery	12,922	15,874	-19
Gynecology	62,979	60,960	3
Urology	51,419	48,338	6
Orthopedics	71,279	62,614	14

\*DFS figure as the base

In the case of psychiatry, some of the difference may be due to a reporting inconsistency, where only discharges from designated psychiatric units of the general hospitals are reported to DFS while any discharge with a psychiatric diagnosis is counted in the October data.

Clearly, for specific categories of hospital discharges, a one-month sample will not always give accurate estimates of absolute yearly levels of the phenomenon of interest. Such a sample is more appropriate for determining relative differences among population subgroups with regard to pertinent variables.